

## Product datasheet for PH306538

### Glycerol 3 Phosphate Dehydrogenase (GPD1) (NM\_005276) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	GPD1 MS Standard C13 and N15-labeled recombinant protein (NP_005267)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC206538
Predicted MW:	37.6 kDa
Protein Sequence:	>RC206538 protein sequence Red=Cloning site Green=Tags(s)

MASKKVCIVGSGNWGSAIAKIVGGNAAQLAQFDPRVTMWVFEEDIGGKKLTEIINTQHENVKYLPGHKLP  
PNVVAVPDVVQAAEDADILIFVVPHQFIGKICDQLKGHLKANATGISLIKGVDEGPNGLKLISEVIGERL  
GIPMSVLMGANIASEVADEKFCETTIGCKDPAQGQLKELMQTPNFRITVVQEVDTVEICGALKNNVAVG  
AGFCDGLGFGDNTKAAVIRLGLMEMIAFAKLFCSGPVSSATFLESCGVADLITTCYGGRRNRKVAEAFART  
GKSIEQLEKELLNGQLQGPETARELYSILQHKGLVDFPLFMAVYKVCYEGQPVGFEFIHCLQNHPEHM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>4</sub> ]-L-Arginine and [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>2</sub> ]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<a href="#">NP_005267</a>
RefSeq Size:	3083
RefSeq ORF:	1047
Synonyms:	GPD-C; GPDH-C; HTGTI
Locus ID:	2819



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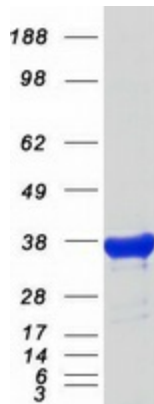
UniProt ID: [P21695](#), [A0A024R138](#)

Cytogenetics: 12q13.12

**Summary:** This gene encodes a member of the NAD-dependent glycerol-3-phosphate dehydrogenase family. The encoded protein plays a critical role in carbohydrate and lipid metabolism by catalyzing the reversible conversion of dihydroxyacetone phosphate (DHAP) and reduced nicotine adenine dinucleotide (NADH) to glycerol-3-phosphate (G3P) and NAD<sup>+</sup>. The encoded cytosolic protein and mitochondrial glycerol-3-phosphate dehydrogenase also form a glycerol phosphate shuttle that facilitates the transfer of reducing equivalents from the cytosol to mitochondria. Mutations in this gene are a cause of transient infantile hypertriglyceridemia. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Mar 2012]

**Protein Pathways:** Glycerophospholipid metabolism

### Product images:



Coomassie blue staining of purified GPD1 protein (Cat# [TP306538]). The protein was produced from HEK293T cells transfected with GPD1 cDNA clone (Cat# [RC206538]) using MegaTran 2.0 (Cat# [TT210002]).